

HOW WE ACHIEVE LEED (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN)



Water Efficiency

Buildings are major users of our potable water supply. This building and site achieves all of the possible LEED points for water efficiency by using strategies like water efficient fixtures, native landscaping that requires little irrigation, and harvesting rainwater to re-use for flushing toilets and outdoor irrigation.



Materials & Resources

During both construction and operation, buildings generate lots of waste and use large quantities of materials and resources. Wise use of resources starts in the construction process—by implementing construction waste recycling we were able to divert 75% of the construction waste from going to a landfill. Many recycled and sustainable materials were used in the building's construction (see separate sign), and building patrons will also be asked to adhere to a green meeting policy ensuring minimal waste generation from events.



Energy & Atmosphere

According to the U.S. Department of Energy, buildings use 39% of the energy and 74% of the electricity produced each year in the United States. This building uses several strategies to minimize energy use and thereby reduce its carbon footprint. It takes full advantage of natural lighting without gaining solar heat in the summer. Timers and occupancy sensors turn the lights off when the building is not in use. Roof overhangs, efficient windows, and the orientation of the building on the site all help add light without unwanted heat. The building has a geothermal system for heating and cooling—the constant temperature of the earth provides a renewable energy source to reduce our fossil fuel consumption, carbon footprint, and energy bill! And last but not least, Structural Insulated Panels (SIP) panels used in walls and the roof provide an extremely high insulation rating.



Indoor Environmental Quality

The U.S. Environmental Protection Agency estimates that Americans spend about 90% of their day indoors, where air quality can be significantly worse than outside. You will probably notice plenty of natural light, comfortable temperature, and good air flow in this building, but you may not notice that the paints, adhesives, carpets, and wood products are not emitting formaldehyde and other volatile organic chemicals that can affect your health. Green offices have been shown to improve the health and performance of workers, and green schools improve the test score of students.



Sustainable Sites

Site selection and development are important components of a building's sustainability. This building earned points for minimizing erosion during the construction process, installing bicycle racks, using native plants for landscaping, and a building design that works with the site visually. Multiple stormwater best management practices (BMP's) were installed to make sure there will be no pollution entering the lake, and infiltration practices on the site will help recharge the groundwater supply.



Innovation in Design

The Innovation in Design category provides bonus points for projects that use innovative technologies and strategies to improve a building's performance well beyond what is required by other LEED credits, or to account for green building considerations that are not specifically addressed elsewhere in LEED. The C.W. Titus Education Facility was opened in 2011, a time when a significant number of green buildings have been constructed locally and across the country. However, when this project started in 1999, the green building movement was in its infancy. (This project help drive green buildings regionally and statewide.) Guidance from architects and professional LEED Consultants helped to make sure that this building met expectations.



Other Factors

LEED also addresses other important factors, such as unique regional environmental issues, linkages to public/alternative transportation, and how the structure facility fits into the fabric of the community. For more information, visit the informative website of the United States Green Building Council.